Remarks

Claims 1-3, 5-19, 22, and 25-31 are now pending in this application. Claims 1-3, 5-8, 10-20, 22, and 23 are rejected. Claims 4, 9, 21, and 24 are allowable. Claims 4, 20-21, and 23-24 are canceled without prejudice, waiver, or disclaimer. Claims 25-31 are newly added. Claims 1, 9, 14, 19, and 22 are amended. No new matter has been added.

In accordance with 37 C.F.R. 1.136(a), a three-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated August 22, 2003 for the above-identified patent application from November 22, 2003 through and including February 22, 2004. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of $950.00 to cover this extension of time request also is submitted herewith. Moreover, an authorization to charge a deposit account for the newly added claims has been submitted herewith.

Applicant respectfully traverses the requirement for drawing corrections. Applicant submits the required drawings corrections.

The rejection of Claims 1-3, 5-8, 10-20, 22, and 23 under 35 U.S.C. § 102(b) as being anticipated by Johansson et al. (U.S. Patent 5,986,539) is respectfully traversed.

Johansson et al. describe a motion control system with powerline communication (column 3, lines 43-44). The motion control system includes a master (12) connected to a slave (14) with a single coaxial cable (16) (column 3, lines 46-47). A computer (18) is connected with an RS-232 serial communications channel (20) to a controller (22) (column 3, lines 47-49). Alternatively, the computer and controller combination can comprise a standalone programmable logic controller (PLC), such as the Galil Motion Control, Inc. (Santa clara, Calif.) model DMC-1500 (column 3, lines 49-52). A controller interface (24) combines power and signals and input/output (I/O) signals to the coax from the controller and a power supply (26) (column 3, lines 52-55). The motion control system would be capable of placing thousands of signals on the coax connection to the slave (column 3, lines 55-57). A driver interface (28) demultiplexes the signals and separates the power from the signals on the coax and

provides stepper pulses, direction signals, enablement control, and power directly to a driver circuit (30) that is preferably very closely located next to a motor (32) (column 3, lines 57-62). The motion control system includes a powerline communication system (40) in which a master (42) communicates with a slave (44) over a pair of power supply wires (column 4, lines 3-5). A direct current (DC) power source (50), such as a battery, is connected through to power a load (52) (column 4, lines 5-7). A pair of communication receiver isolation transformers (54, 56) are placed with their primary windings in series with one of the power supply wires (46, 48) (column 4, lines 7-9). DC current flow around the loop is relatively unimportant to the communication function of the powerline communication system, and so such do not appear at the secondary windings (column 4, lines 10-12). A pair of communication transmitter isolation transformers (58, 60) are respectively connected to drive the gate inputs of a pair of MOSFET power transistors (62, 64) with their drains and sources connected across the power supply wires (column 4, lines 12-16).

Claim 1 has been amended to include the recitations of Claim 4, which is objected to as being dependent upon a rejected base claim, but containing allowable subject matter. For the reasons set forth above, Claim 1 is submitted to be patentable over Johansson et al.

Claims 2-3, 5-8, and 10-13 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-3, 5-8, and 10-13 are considered in combination with the recitations of Claim 1, Applicant submits that Claims 2-3, 5-8, and 10-13 likewise are patentable over Johansson et al.

Claim 14 recites a servo motor assembly including "a motor; at least one transducer coupled to said motor; a power cable configured for electrical connection to a power source and electrically connected to said motor and said at least one transducer, said at least one transducer configured to transmit data over said power cable; and an amplifier configured to be electrically connected to said motor via said power cable."

Johansson et al. do not describe or suggest a servo motor assembly including a motor, at least one transducer coupled to the motor, a power cable configured for electrical connection to a power source and electrically connected to the motor and

the at least one transducer, the at least one transducer configured to transmit data over the power cable, and an amplifier configured to be electrically connected to the motor via the power cable.

Specifically, Johansson et al. do not describe or suggest an amplifier configured to be electrically connected to the motor via the power cable. Rather, Johansson et al. describe the controller interface that combines power and signals and input/output (I/O) signals to the coax from the controller and the power supply, the pair of communication receiver isolation transformers that are placed with their primary windings in series with one of the power supply wires, and the pair of communication transmitter isolation transformers that are respectively connected to drive the gate inputs of a pair of MOSFET power transistors with their drains and sources connected across the power supply wires. Accordingly, Johansson et al. do not teach the amplifier as recited in Claim 14. For the reasons set forth above, Claim 14 is submitted to be patentable over Johansson et al.

Claims 15-18 depend, directly or indirectly, from independent Claim 14. When the recitations of Claims 15-18 are considered in combination with the recitations of Claim 14, Applicant submits that Claims 15-18 likewise are patentable over Johansson et al.

Claim 19 has been amended to include the recitations of Claim 21, which is objected to as being dependent upon a rejected base claim, but containing allowable subject matter. For the reasons set forth above, Claim 19 is submitted to be patentable over Johansson et al.

Claim 20 has been canceled.

Claim 22 has been amended to include the recitations of Claim 24, which is objected to as being dependent upon a rejected base claim, but containing allowable subject matter. For the reasons set forth above, Claim 22 is submitted to be patentable over Johansson et al.

Claim 23 has been canceled.

For the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 1-3, 5-8, 10-20, 22, and 23 be withdrawn.

Newly added Claim 25 depends from independent Claim 14, which is submitted to be in condition for allowance and is patentable over the cited art. For at least the reasons set forth above, Applicant respectfully submits that Claim 25 is also patentable over the cited art.

Newly added Claim 26 recites a method for controlling a servomechanism. None of the art cited in the Office Action, considered alone or in combination, describe or suggest a method as recited in Claim 26. Accordingly, Applicant respectfully submits that Claim 26 is patentable over the cited art.

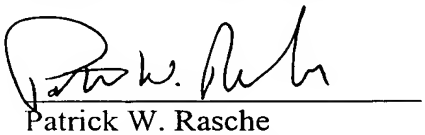
Newly added Claims 27 and 28 depend from independent Claim 26, which is submitted to be in condition for allowance and is patentable over the cited art. For at least the reasons set forth above, Applicant respectfully submits that Claims 27 and 28 are also patentable over the cited art.

Newly added Claim 29 recites a method for installing an actuator. None of the art cited in the Office Action, considered alone or in combination, describe or suggest a method as recited in Claim 29. Accordingly, Applicant respectfully submits that Claim 29 is patentable over the cited art.

Newly added Claims 30 and 31 depend from independent Claim 29, which is submitted to be in condition for allowance and is patentable over the cited art. For at least the reasons set forth above, Applicant respectfully submits that Claims 30 and 31 are also patentable over the cited art.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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